

Listing of Claims:

1. (Currently amended) A method for making an anodic oxide coating on a valve metal electrically conductive comprising:

- 1) placing an anodized valve metal in a ~~low-water-content~~ polar aprotic solvent having a water content below about 0.1 wt. % containing an ionogen;
- 2) cooling the solvent to a temperature between -20°C and -60°C;
- 3) inserting a counter electrode in said solvent; and
- 4) connecting said valve metal and said counter electrode to a power supply so that the valve metal is biased positive and passing a current.

2. (Previously presented) A method according to claim 1 wherein the valve metal is selected from the group consisting of tantalum, aluminum, niobium and titanium.

3. (Currently amended) A method according to claim 1 wherein the polar aprotic solvent is selected from the group consisting of 1) dimethyl formamide and 2) about 25 vol % dimethylsulfoxide/75 vol % 4-butyrolactone.

4. (Previously presented) A method according to claim 1 wherein said ionogen is selected from the group consisting of monocarboxylic acids, dicarboxylic acids, and sulfonic acids.

5. (Currently amended) A method for coating an anodized valve metal oxide with a conductive polymer comprising the steps of:

- 1) placing an anodized valve metal in a ~~low-water-content~~ polar aprotic solvent having a water content below about 0.1 wt. % containing an ionogen;
- 2) adding a monomer precursor for a conductive polymer;

3) cooling the solvent to a temperature between -20°C and -60°C;  
4) inserting a counter electrode in said solvent; and  
5) connecting said valve metal and said counter electrode to a power supply so that the valve metal is biased positive and passing a current.

6. (Currently amended) A method according to claim 5 wherein the ~~monomerprecursor~~ monomer precursor is selected from the group consisting of pyrrole, thiophene, aniline and derivatives thereof.

7. (Previously presented) A method according to claim 5 wherein the valve metal is selected from the group consisting of tantalum, aluminum, niobium and titanium.

8. (Currently amended) A method according to claim 5 wherein the polar aprotic solvent is selected from the group consisting of 1) dimethyl formamide and 2) about 25 vol % dimethylsulfoxide/75 vol % 4-butyrolactone.

9. (Previously presented) A method according to claim 5 wherein said ionogen is selected from the group consisting of monocarboxylic acids, dicarboxylic acids, and sulfonic acids.

10 (Currently amended) A method for plating a metal on an anodized valve metal oxide comprising:

1) placing an anodized valve metal in a ~~low water content~~ polar aprotic solvent having a water content below about 0.1 wt. % containing an ionogen;

2) cooling the solvent to a temperature between -20°C and -60°C;

3) inserting a counter electrode in said solvent; and  
4) connecting said valve metal and said counter electrode to a power supply so  
5) that the valve metal is biased positive and passing a current until the oxide is  
conductive; and connecting said valve metal and counter electrode to a power supply so that  
the valve metal is biased negative;

wherein a salt of a conductive metal is added at any time after step 1.

11. (Currently amended) A method according to claim 10 wherein said salt is selected  
from the group consisting of a salts of silver, gold, copper and zinc ~~salts~~.